TABLE II-5. EFFECTS ON CBO BASELINE BUDGET PROJECTIONS OF SELECTED CHANGES IN ECONOMIC ASSUMPTIONS (By fiscal year, in billions of dollars)

Economic Variable	1987	1988	1989	1990	1991	1992
Real Growth: Effect of One						
Percentage-Point Higher Annual						
Rate Beginning January 1987			25	4.0		
Change in revenues	4	14	27	43	61	83
Change in outlays	-1	-3	-6	-10		-22
Change in deficit	-5	-16	-33	-52	-76	-105
Unemployment: Effect of One						
Percentage-Point Lower Annual						
Rate Beginning January 1987						
Change in revenues	19	30	31	34	36	37
Change in outlays	-3	-6	-8	-11	-14	-17
Change in deficit	-22	-36	-40	-45	-50	-54
Interest Rates: Effect of One						
Percentage-Point Higher Annual						
Rates Beginning January 1987						
Change in revenues	0	0	0	0	0	0
Changes in outlays	3	11	16	20	23	26
Change in deficit	3	11	16	20	23	26
Inflation: Effect of One						
Percentage-Point Higher Annual						
Rate Beginning January 1987						
Change in revenues	5	14	27	39	53	70
Change in outlays	3	15	26	38	51	64
Change in deficit	-2	<u>a</u> /	a/	<u>a</u> /	-2	-6
A	_	=	=	==		_

SOURCE: Congressional Budget Office.

NOTE: Totals include Social Security, which is off-budget.

a. Less than \$500 million.



about overall economic activity. Both assume that a 1.0 percentage-point increase in real output is associated with a 0.4 percentage-point decrease in the unemployment rate, as might be caused by an increase in aggregate demand. In the higher-growth case, real GNP growth is 1 percent higher than the baseline every year, causing fiscal year 1992 GNP to be more than 5 percent above its baseline level. In the lower unemployment case, there is a one-time increase in the growth rate; the level of real GNP is 2.5 percent above the baseline for the entire period.

Both the higher real growth and lower unemployment alternatives thus show higher revenues, lower outlays, and lower deficits. Only the pattern is different. The improvement in the deficit resulting from a percentage-point increase in the real growth rate is small at first but increases substantially each year. In the case of a percentage-point drop in the unemployment rate, the improvement in the deficit is much larger to begin with but grows relatively little.

The rapid increase in the federal debt, resulting from a series of large deficits, has made the budget extremely sensitive to interest rates. As shown in Table II-5, a one percentage-point increase in all government interest rates would increase the deficit by \$11 billion in 1988 and by \$26 billion in 1992. Virtually all this increase in the deficit is attributable to higher net interest outlays. For simplicity, no change in revenues is assumed in the rule of thumb on interest rates. With the level of GNP fixed by assumption, an increase in interest rates is likely to raise personal interest income at the expense of more heavily taxed corporate income and, therefore, to reduce revenues. This reduction in revenues more than offsets the increase in Federal Reserve profits resulting the higher interest rates.

An increase in inflation would have little effect on the deficit. Most expenditures are either explicitly or implicitly adjusted for inflation. The baseline budget projections and the calculations shown in Table II-5 also assume that both defense and nondefense discretionary appropriations are adjusted to keep pace with inflation. The Tax Reform Act of 1986 temporarily suspended indexing of the personal income tax. Individual income tax brackets and standard deductions are indexed for inflation beginning in 1989, after a two-year pause; the personal exemption is indexed again beginning in 1990. The inflation rule of thumb also holds real interest rates constant-that is, it assumes that nominal interest rates will rise by one percentage point with a one percentage-point increase in inflation.

Under these assumptions, inflation increases revenues and outlays almost equally. While the nominal value of the deficit declines only slightly,

the higher inflation raises GNP and causes the deficit-to-GNP ratio to fall. In 1992, for example, the deficit would represent 1.2 percent of GNP in the higher inflation scenario, compared with 1.4 percent in the baseline. If discretionary appropriations were not adjusted for the increased inflation, the deficit would be \$2 billion lower than the baseline in 1988 and \$29 billion lower in 1992.

These rules of thumb paint only a stylized picture of the relationship between the budget and the economy, of course, because a sustained change in one economic variable does not generally occur without changes in other variables as well. Moreover, because CBO does not rely on rules of thumb for preparing its budget projections, they only approximate how the CBO baseline budget projections would change with such changes in the economic outlook.

SPENDING PROJECTIONS BY MAJOR CATEGORY

Outlays are projected to grow by 1.9 percent in 1987, the lowest rate of increase since 1965. In part, outlays are held down by asset sales and other one-time savings. In addition, net interest outlays are projected to drop slightly in 1987 as maturing federal debt is refinanced at current and lower interest rates. Four budget functions--national defense, Medicare, Social Security, and net interest--account for 69 percent of outlays in 1987 and absorb 83 percent of 1987 revenues. (Appendix B contains functional totals for spending.)

The unusually slow rate of growth of outlays in 1987 may herald a longer-run trend. Over the whole 1987-1992 period, spending is projected to grow at an annual rate of 5 percent if policies do not change--substantially below the 10 percent annual growth rate actually experienced earlier in the 1980s. Adjusted for inflation (as measured by the GNP deflator), real outlays grow by less than 1 percent per year from 1987 to 1992, compared with 4 percent annually from 1980 to 1986. Several factors contribute to the projected slowdown in the growth of federal spending. These include real reductions in defense appropriations in 1986 and 1987, declines in interest rates since 1984, and recent slackening in the growth of Social Security and other entitlements. In addition, the projections allow for no future real growth in defense or nondefense discretionary spending and no legislated expansion of entitlement programs. Under these assumptions, outlays will decline from their 1985 peak of 24.0 percent of GNP to 22.9 percent of GNP in 1987 and 21.1 percent in 1992 (see Table II-6 and Figure II-3).

National Defense

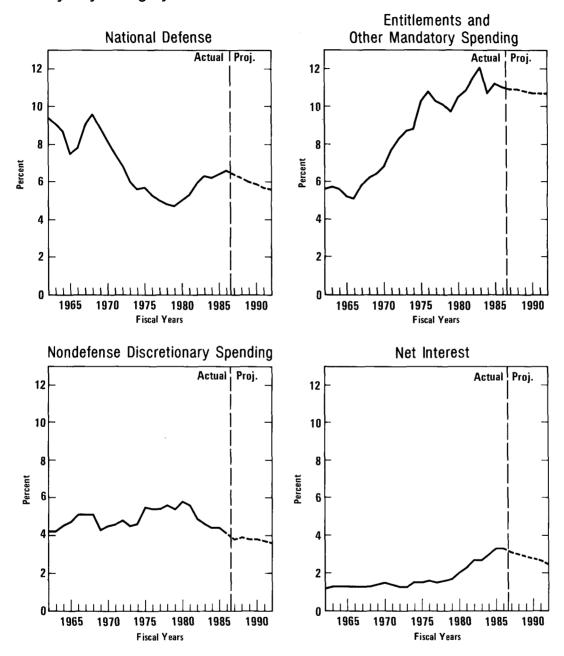
National defense programs include not only the military activities of the Department of Defense but also the nuclear weapons programs of the Department of Energy and miscellaneous activities, such as maintaining defense stockpiles and administering the Selective Service. As it did last year, the CBO defense baseline assumes no real growth in appropriations over the 1987 program level of \$289 billion--the same assumption made for nondefense discretionary spending. The resulting budget authority figures--\$302 billion in 1988 and \$316 billion in 1989--are \$1 billion to \$2 billion lower than the amounts assumed in the fiscal year 1987 budget resolution.

TABLE II-6. CBO BASELINE OUTLAY PROJECTIONS FOR MAJOR SPENDING CATEGORIES (By fiscal year)

	1986	1987			Projection	s	
Major Category	Actual	Base	1988	1989	1990	1991	1992
		In Bil	lions of Dol	lars			
National Defense Entitlements and Other	273	280	290	303	317	332	346
Mandatory Spending Nondefense Discre-	457	481	512	544	578	617	660
tionary Spending	170	166	185	193	204	213	220
Net Interest	136	135	141	147	152	155	154
Offsetting Receipts	-47	-53	-59	-63	-66	-70	-75
Total Outlays	990	1,008	1,069	$\overline{1,124}$	1,184	1,247	1,305
On-Budget Outlays	806	814	865	908	956	1,004	1,049
Off-Budget Outlays	183	195	205	216	229	243	256
		As a F	Percent of C	NP			
National Defense Entitlements and Other	6.6	6.4	6.2	6.0	5.9	5.7	5.6
Mandatory Spending Nondefense Discretionar	11.0	10.9	10.9	10.8	10.7	10.7	10.7
Spending	4.1	3.8	3.9	3.8	3.8	3.7	3.6
Net Interest	3.3	3.1	3.0	2.9	2.8	2.7	2.5
Offsetting Receipts	-1.1	-1.2	-1.3	-1.2	-1.2	-1.2	-1.2
Total Outlays	$\overline{23.8}$	22.9	22.8	22.3	21.9	21.5	21.1
On-Budget Outlays	19.4	18.5	18.4	18.1	17.7	17.3	17.0
Off-Budget Outlays	4.4	4.4	4.4	4.3	4.2	4.2	4.1

Figure II-3.

Outlays by Category as Percents of GNP



The baseline projections assume zero real growth not only for defense appropriations in total but also for each of its major accounts--military personnel, operation and maintenance, research and development, and so on. As is shown in Box II-2, however, real defense spending in recent years has not increased or decreased at the same rate for all programs. Even if the Congress appropriated \$302 billion for defense in 1988, the program mix would almost certainly differ from the 1987 mix, which is assumed here. If the largest increases in budget authority were made in the accounts with the shortest lags between appropriations and outlays, 1988 outlays would be higher than in the baseline. In establishing the defense outlay targets in the Congressional budget resolution, the Budget Committees must, therefore, consider not only the total level of defense resources but also its distribution.

Entitlements and Other Mandatory Spending

An entitlement program is one that provides benefits to any person, business, or unit of government that meets the established eligibility requirements. Authorization for entitlements constitutes a binding obligation of the federal government, and eligible recipients have legal recourse if the obligation is not met. In addition, as described in Appendix A, some other programs are treated as mandatory even though the House and Senate Budget Committees do not consider them entitlements. Baseline outlays for entitlement programs grow at a rate of 6.3 percent per year between 1986 and 1992, or 2.3 percentage points faster per year than the projected growth in the GNP deflator.

Table II-7 divides entitlement and mandatory spending into two broad categories--means-tested and non-means-tested programs. The means-tested category comprises programs that provide cash benefits or services to low-income people. These programs represent about 15 percent of entitlement outlays--\$73.4 billion in 1987 and \$102.3 billion in 1992. The largest and most rapidly growing program in this category is Medicaid. Others include Food Stamps, assistance payments (primarily Aid to Families with Dependent Children), and Supplemental Security Income. Eligibility for the earned income tax credit, included in Table II-7 under other means-tested programs, was expanded significantly by the Tax Reform Act.

The bulk of entitlement spending consists of non-means-tested programs, predominantly Social Security and Medicare. These two programs constitute about three-fifths of entitlement spending and almost 7 percent of GNP. Social Security grows each year by roughly the rate of inflation plus growth in the beneficiary population that averages 2 percent a year.

BOX II-2 RECENT TRENDS IN REAL DEFENSE SPENDING

The defense budget is about 45 percent higher in 1987 than it was in 1980 after adjusting for inflation. The largest increases occurred in 1981 and 1982, as the table shows. In the last two years, spending authority has declined by about 2 percent per year in real terms. Annual funding growth has been steadiest for military personnel; operation and maintenance; and research, development, test, and evaluation (RDT&E). Military personnel and operation and maintenance are also the two areas of the defense budget where changes in spending authority result most quickly in changes in cash outlays. Funding growth for procurement, military construction, family housing, and other accounts has been much more variable. Real spending authority for these accounts has grown by 20 percent or more for a third of the time but has fallen with equal frequency. Outlays for these accounts have grown smoothly, however, because of longer and more variable time lags between appropriations and outlays.

Annual Real Growth in Defense Spending Authority
(By fiscal year, in percent change)

Account	1981	1982	1983	1984	1985	1986	1987
Military Personnel	2	2	2	2	1	2	1
Operation &							
Maintenance	9	6	5	5	6	-3	2
Procurement	25	25	17	3	6	-4	-8
RDT&E	13	14	10	14	10	7	4
Military Construction	39	38	-12	-3	18	-6	-8
Family Housing Subtotal,	<u>21</u>	_4	<u>20</u>	<u>-5</u>	_5	<u>-5</u>	_9
Department of DefenseMilitary	13	12	7	5	6	-2	-2
Other Defense	<u>18</u>	<u>16</u>	<u>24</u>	_6	_9	-4	<u>a</u> /
Total	13	12	8	5	6	-2	-2

SOURCE: Congressional Budget Office.

NOTE: The figures shown in this table adjust budget authority for transfers and rescissions of unobligated balances. They are conceptually similar to total obligational authority. The 1986 column incorporates the reductions made under the Balanced Budget Act.

a. Less than 0.5 percent.

TABLE II-7. CBO BASELINE OUTLAY PROJECTIONS FOR ENTITLEMENTS AND OTHER MANDATORY SPENDING (By fiscal year, in billions of dollars)

	1986	1987		1	Projections		
	Actual	Base	1988	1989	1990	1991	1992
Means-Tested Programs							
Medicaid	25.0	27.3	30.0	33.0	36.1	39.4	42.8
Food stamps	11.6	11.8	12.4	12.6	13.1	13.9	14.4
Supplemental Security							
Income	10.3	10.8	12.2	12.1	11.8	13.5	14.3
Assistance payments							
program	9.3	9.8	10.2	10.5	11.0	11.5	12.2
Veterans' pension	3.9	3.8	3.8	3.8	3.7	3.7	3.6
Child nutrition	3.8	4.1	4.4	4.7	5.0	5.3	5.7
Guaranteed student loans	3.4	2.6	2.7	2.6	2.6	2.5	2.5
Other	3.1	3.1	4.8	6.1	6.3	6.5	6.8
Total, Means-							
Tested Programs	70.3	73.3	80.5	85.5	89.6	96.3	102.3
Non-Means-Tested Programs							
Social Security	196.7	205.8	218.5	233.1	249.8	267.3	285.5
Medicare	74.2	78.1	90.0	99.6	111.7	124.7	139.1
Subtotal	270.9	283.9	308.4	332.6	361.5	392.0	424.6
Other Retirement and Disability							
Federal civilian a/	24.1	25.8	27.6	29.8	32.2	34.7	37.4
Military	17.6	18.1	19.1	20.2	21.5	22.8	24.3
Other	4.9	5.0	5.2	5.5	5.7	5.9	6.1
Subtotal	46.6	48.9	51.9	55.5	59.4	63.4	67.8
Unemployment							
Compensation	17.8	18.0	18.3	19.0	19.2	19.9	20.9
Other Programs							
Veterans' benefits b/	12.9	12.9	13.3	13.3	13.3	13.5	13.7
Farm price supports	25.8	24.8	25.3	24.2	21.8	19.2	18.3
General revenue sharing	5.1	0.1					
Social services	4.0	4.4	4.6	5.1	5.5	5.5	5.4
Other	3.9	14.7	9.8	8.8	8.1	7.4	7.5
Subtotal	51.7	56.8	53.0	51.4	48.6	45.7	44.8
Total, Non-Means-							
Tested Programs	387.0	407.6	431.6	458.6	488.7	521.0	558.0
Total Outlays	457.3	481.0	512.0	544.1	578.4	617.4	660.3

 $SOURCE: \qquad Congressional\ Budget\ Office.$

a. Includes Coast Guard retirement.

b. Includes veterans' compensation, readjustment benefits, life insurance, and housing programs.

Medicare grows much faster, because of medical care inflation and increasing use of hospital and physician services. Other retirement and disability programs, primarily federal civilian and military retirement, make up about 10 percent of entitlement spending and grow from \$49 billion in 1987 to \$68 billion in 1992 in CBO's baseline. Unemployment compensation increases relatively little in CBO's projections--from \$18 billion in 1987 to \$21 billion in 1992--as the unemployment rate declines from 6.7 percent to 6 percent. The remaining entitlement and mandatory spending programs total \$57 billion in 1987 but shrink to \$45 billion in 1992. Slow growth in certain programs (such as non-means-tested veterans' benefits) is more than offset by projected declines in spending for farm price supports, the Federal Deposit Insurance Corporation, and the Federal Savings and Loan Insurance Corporation.

Nondefense Discretionary Spending

Nondefense discretionary spending covers all remaining discretionary programs subject to annual appropriations or to loan or obligation limits imposed in appropriation acts. It includes portions of all budget functions except national defense, net interest, and undistributed offsetting receipts. A large part of this category represents the salary and expense accounts that finance the ongoing operations of the civilian agencies of government; these activities include the legislative, judicial, and tax-collecting functions; the conduct of foreign affairs; and the costs of administering Social Security and Medicare. This category also covers about half of the grants to state and local governments, including those for subsidized housing, highways and mass transit, elementary and secondary education, employment and training assistance, and low-income energy assistance. Nondefense discretionary spending declined from 5.8 percent of GNP in 1980 to 4.1 percent in 1986--about the same share of GNP as it represented in 1962. It averages 3.8 percent of GNP in the baseline projections, which generally assume no real growth in appropriations.

Net Interest

Net interest primarily reflects the cost of servicing the government's large and growing debt. While the government owes interest on its borrowing, it also earns interest on certain assets: loans made to the public, cash balances, and so forth. Net interest equals the government's interest costs less its interest income.

and the same of th



In CBO's baseline, net interest grows from \$135 billion in 1987 to a projected \$154 billion in 1992. Trends in net interest outlays follow the growth in the federal debt and changes in the effective interest rate on this debt. CBO projects that net interest outlays in 1987 will actually be lower than in 1986, even as the government adds substantially to its debt. This decline stems primarily from the gains from refinancing past years' debt at today's interest rates. CBO estimates that over \$200 billion in notes and bonds maturing in fiscal year 1987 will be refinanced at new interest rates averaging more than three percentage points lower than their old rates.

Interest outlays resume growing after 1987, as the government's continuing need to borrow outweighs the gains from refinancing the old debt at lower rates. The government's interest earnings also shrink, as loan asset sales, sluggish new lending, and lower interest rates combine to reduce interest income. By 1992, net interest outlays are about 14 percent higher than in 1987, although debt is projected to grow by more than one-third during the same period.

Net interest projections are highly sensitive to assumptions about deficits as well as interest rates. Overly optimistic revenue or outlay estimates, for example, would cause errors in the net interest projections by understating borrowing needs. If revenues are overestimated--or noninterest outlays underestimated--by \$10 billion in each year, extra net interest costs would grow from \$300 million in 1987 to over \$4 billion in 1992.

According to CBO projections, debt held by the public will grow from \$1.7 trillion at the end of 1986 to over \$2.5 trillion at the end of 1992 (see Table II-8). Debt held by the public represents the federal government's cumulative borrowing over the years from individuals, pension funds, foreigners, and other private holders (including the Federal Reserve System). This measure of the federal debt best reflects the federal government's presence in the credit markets and is the measure most closely related to net interest costs. Debt held by the public grows each year by the amount of government borrowing.

As Table II-8 shows, government borrowing roughly equals the deficit but differs slightly because other factors affect the government's financing needs. For example, in 1986 the government borrowed \$15 billion more than the deficit, primarily because it built up cash balances during the year. Other factors that cause the government's borrowing needs to differ from its deficit include interest accrued but not yet paid, checks outstanding, seignorage (the profit from minting coins), and noncash outlays. The FDIC's issuance of special notes to member banks, for example, is counted as a budget outlay but does not lead to an immediate cash outflow.

TABLE II-8. BUDGET FINANCING AND DEBT (By fiscal year)

	1986	1987		I	Projections	;	
	Actual	Base	1988	1989	1990	1991	1992
		In Billions	of Dollars				
Budget Financing							
On-budget deficit	-237	-193	-205	-208	-192	-176	-160
Off-budget surplus	17	19	36	46	58	67	75
Total deficit	-221	-174	-169	-162	-134	-109	-85
Means of financing other than borrowing from							
the public <u>a</u> /	-15	10	2	3	3	4	1
Borrowing from the							
public	236	165	167	159	131	105	84
Debt Outstanding, End of Year Debt held by the							
public	1,746	1,910	2,077	2,236	2,367	2,473	2,556
Debt held by govern- ment accounts	384	454	539	637	<u>750</u>	872	1,001
Total, gross fed- eral debt	2,130	2,364	2,617	2,873	3,117	3,345	3,557
Debt subject to statutory limit	2,111	2,351	2,608	2,870	3,114	3,341	3,553
		As a Perce	ent of GNP				
Debt held by the public	41.9	43.4	44.2	44.4	43.8	42.7	41.3

a. Primarily changes in cash balances and adjustments required to put budget on a cash basis.

Though the federal government's debt has grown faster than the economy since the early 1980s, CBO's baseline projections show an end to this trend. The ratio of debt to GNP peaks at 44 percent in the 1988-1990 period. In 1992, the debt-to-GNP ratio is projected to be 41 percent--very close to its current level.

While debt held by the public best measures the economic importance of federal government borrowing, many people are more familiar with a larger figure--the gross federal debt. The gross debt includes very large holdings by federal government trust funds and other special funds. CBO projects that these government account holdings will grow from about \$400 billion at present to \$1 trillion by 1992, primarily because of large surpluses in the federal civilian and military retirement funds and in Social Security. Interest payments on these holdings are intragovernmental and do not affect the total deficit. Gross federal debt--including both debt held by the public and by government accounts--is similar to the figure voted on by the Congress when it periodically enacts a new statutory debt limit. The current temporary debt ceiling of \$2.3 trillion expires on May 15, 1987, and the ceiling reverts to its permanent level of \$2.111 trillion.

Offsetting Receipts

Offsetting receipts comprise federal government proprietary receipts from the public that are subtracted from outlays rather than included in revenues, as well as certain intragovernmental transactions. Of the \$53 billion estimated in this category for 1987, \$31 billion is the federal employer share of employee retirement. Another \$7 billion consists of premiums paid by enrollees in Supplementary Medical Insurance (Medicare Part B) and by those who do not have sufficient quarters of coverage for Hospital Insurance (Medicare Part A). The next largest item, \$4 billion, is rents and royalties for leases on Outer Continental Shelf tracts. Other receipts are for the sale or lease of minerals, electric power, and timber. Offsetting receipts are projected to represent 1.2 percent to 1.3 percent of GNP in all years of the projection period.

REVENUE PROJECTIONS BY MAJOR SOURCE

Baseline revenues (including off-budget revenues) are estimated to grow by 8.4 percent in 1987, reflecting the projected pickup in economic growth. This revenue growth also reflects, to a lesser extent, recently enacted revenue increases, many of which are not sustained through the projection period. Revenue growth in 1986, a year of disappointing economic performance, was only 4.8 percent. Revenue growth in both 1987 and 1988 is pro-

projected to exceed GNP growth once again, bringing 1988 baseline revenues to \$900 billion, or 19.2 percent of GNP.

Since August, new tax data, other budget-related information, and revised economic assumptions have reduced projected revenue growth for the near term and raised it for the out-years. Combined with new legislation, these factors cause revenues to grow faster than GNP over the 1988-1992 period, producing a revenue-to-GNP ratio of 19.7 percent in 1992 (see Table II-9).

The Tax Reform Act of 1986 was far and away the most significant element in the flurry of tax-related legislation enacted at the end of the

	1986	1987			Projection	s	
Major Source	Actual	Base	1988	1989	1990	1991	1992
		In Bill	ions of Doll	ars			
Individual Income	349	361	381	412	458	502	546
Corporate Income	63	101	119	126	138	151	162
Social Insurance	284	301	329	353	383	411	436
Excise	33	33	32	31	32	33	33
Estate and Gift	7	6	6	5	4	4	3
Customs Duties	13	14	15	17	18	19	21
Miscellaneous	20	18	18	<u>17</u>	<u> 17</u>	<u> 18</u>	18
Total Revenues	769	834	900	962	1,050	1,138	1,220
On-Budget Revenues	569	620	660	700	764	828	889
Off-Budget Revenues	200	214	241	262	287	310	331
		As a P	ercent of G	NP			
Individual Income	8.4	8.2	8.1	8.2	8.5	8.7	8.8
Corporate Income	1.5	2.3	2.5	2.5	2.5	2.6	2.6
Social Insurance	6.8	6.8	7.0	7.0	7.1	7.1	7.1
Excise	0.8	0.7	0.7	0.6	0.6	0.6	0.5
Estate and Gift	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Customs Duties	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Miscellaneous	0.5	0.4	0.4	0.3	0.3	0.3	0.3
Total Revenues	18.5	19.0	$\overline{19.2}$	19.1	19.4	19.6	19.7
On-Budget Revenues	13.7	14.1	14.0	13.9	14.1	14.3	14.4
Off-Budget Revenues	4.8	4.9	5.1	5.2	5.3	5.4	5.3



last Congress. The bill was intended to be approximately revenue neutral over the five-year period of 1987 through 1991. In the short term, however, the tax act and other new legislation impart revenue swings of as much as \$11 billion from year to year from 1988 through 1990. In 1991 and 1992, the new legislation adds roughly 0.1 percent to the revenue share of GNP.

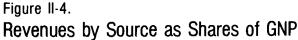
The Tax Reform Act of 1986, passed in the closing days of the last Congress, is the most important piece of tax legislation enacted since World War II. The Internal Revenue Code of 1986 is the first complete revision of the Code since 1954. The act reduces income tax rates, removes many low income earners from the tax rolls, and scales back tax preferences. As mentioned above, the act is designed to maintain longer-run, steady-state revenues. From 1987 through 1992, however, it alternately raises, lowers, and then again raises revenues as older provisions are phased out and new ones are phased in (see Table II-10). Over the 1987-1992 period as a whole, the bill adds about \$7 billion to revenues. This increase is offset by a more generous earned income tax credit, the refundable portion of which is counted as a budget outlay. Other recently enacted legislation increases revenues in each year.

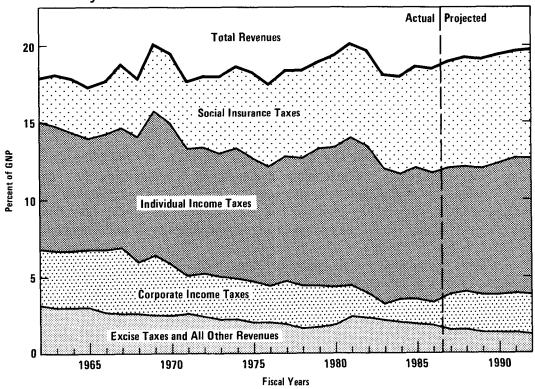
The Tax Reform Act significantly reduces personal income tax liability and increases corporate liability. From 1987 through 1992, the act will reduce individual income taxes by almost \$130 billion and increase corporate taxes by about \$145 billion. It should be kept in mind that this shift in taxes occurs in a system in which the individual tax share of GNP remains relatively high and the corporate tax share rises as profits continue to recover from their recent low levels. Nontheless, the mix of federal taxes will not change significantly (see Figure II-4). By 1992, even with the shift in liability under the act, the individual income tax share of GNP will be relatively

TABLE II-10. REVENUE EFFECTS OF LEGISLATION ENACTED SINCE AUGUST 1986 (By fiscal year, in billions of dollars) 1988 1992 Legislation 1987 1989 1990 1991 Tax Reform Act 11.6 -1.7-9.6 3.7 4.6 -1.3 4.7 Other Legislation 5.47.5 6.7 <u>5.5</u> 4.5 5.8 Total 17.0 -2.94.1 8.2 9.3

high by historical standards. At 8.8 percent of GNP, it is just below the 8.9 percent share experienced in 1979 when inflation was driving up personal tax burdens. By 1992, the boosted corporate income tax share of GNP will return to the historically modest levels of the late 1970s, themselves the results of 20 years of decline in the corporate profits share of GNP and reductions in the average tax rate.

Three bills account for almost all the other new revenues. These are the continuing resolution that contained appropriations for fiscal year 1987, specifically the appropriation for the Internal Revenue Service (IRS); the Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499); and the Omnibus Budget Reconciliation Act of 1986. The largest





addition to revenues is expected to result from the appropriation of additional resources for improved compliance and accelerated collection of past taxpayer liabilities. This addition should result from increasing examination of tax returns, reducing the backlog of disputed tax cases, and increasing information return matching. Most of the money to fund these initiatives will be used to hire more IRS examiners and other IRS staff. CBO assumes that the new personnel will be retained in later years. Once in place, these initiatives are estimated to raise tax collections by about \$3 billion per year.

The Superfund Act reimposes excise taxes on petroleum and chemical feedstocks with increases in some rates and levies a new broad-based tax on corporations' alternative minimum taxable income. Once in place, these taxes will raise over \$1 billion per year. Superfund taxing authority is scheduled to expire after December 31, 1991.

The major revenue-raising vehicle in the Reconciliation Act is the increase in Internal Revenue Service penalties for tax delinquency, which will contribute \$800 million to \$900 million to the Treasury each year. Most of the other revenue-raising provisions, such as the speed-up in remittance of alcohol and tobacco taxes, have only temporary effects. Other new taxes and fees raise modest amounts of revenue in each year.

BASELINE CREDIT PROJECTIONS

The credit baseline shows the level of new direct loan obligations and primary loan guarantee commitments that, as in the baseline for spending and revenues, would occur with the continuation of current policies. Budget outlays do not accurately portray the cost of federal credit activities (see Box II-3). Consequently, they must be measured separately and analyzed.

Credit programs with appropriated limits on loan obligations or commitments are projected to increase at the rate of inflation. For programs without appropriated limits, the projections represent CBO's best estimate of loan activity. Total federal credit activity in 1987 is estimated to equal \$183 billion in new direct loan obligations and new primary loan guarantee commitments. Under the baseline assumptions, total credit activity is projected to decrease to \$154 billion in 1988, then slowly climb to \$165 billion by 1992 (see Table II-11).

Obligations for direct loans are projected to decrease each year from \$42 billion in 1987 to \$34 billion in 1992. The decline largely stems from a

BOX II-3 BUDGETARY TREATMENT OF CREDIT PROGRAMS

The current budgetary treatment of federal credit activities gives a misleading picture of program costs and can distort the measure of budget outlays and the deficit. Under the cash-based federal budget accounting system, loan disbursements are scored as outlays and loan repayments are recorded as offsetting collections. This treatment overstates the costs of new loans in the year loans are made. Loan guarantees, on the other hand, have no cash outlays until a default occurs, which has the effect of understating the costs of new loan guarantees in the first year. Furthermore, if fees are charged for new loan guarantees, the shortrun effect is to reduce outlays and the deficit since these fees are recorded as offsetting collections. Offsetting collections from loan repayments can be accelerated from the future to the current budget period by loan asset sales. Such sales are now being used to achieve deficit reductions, but they distort the deficit as an indicator of the current economic impact of federal programs. The effect of loan sales on private credit markets is very close to that of federal borrowing.

Most analysts believe that a more appropriate measure of cost for direct loans and loan guarantees is their subsidy cost, or the present value of future defaults, interest losses, capital costs, and administrative expenses. The President's Commission on Budget Concepts recommended in 1967, for example, that only the subsidy elements in federal loans be included with other expenditures when measuring the economic impact of the federal budget.

The Administration proposes to change the way federal credit programs are treated in the budget. Under its proposed reform, new loans would be sold soon after disbursement and new loan guarantees would be reinsured in the private market. The difference between cash disbursements and the proceeds of loan sales would approximate the subsidy value of new loans. Similarly, the cost of reinsuring loan guarantees with the private sector would be a measure of their subsidy value. The proposal uses market transactions, therefore, to convert credit cash flows into a subsidy cost measure that is consistent with the existing budget accounting system.

The Administration's proposal, however, would not eliminate the distortions resulting from selling or refinancing loans made in previous years. In order to do this, a change in the budget accounting system probably would be required. One approach would be to substitute estimated subsidy values for the cash flows associated with credit programs in the budget, as recommended by the President's Commission on Budget Concepts, and treat the credit cash flows as a means of financing the deficit. The substitution of subsidy cost for cash flows would tighten the link between the deficit and the economic impact of the budget. It would also immunize the deficit from the effects of loan sales, refinancing existing loans, and substituting loan guarantees for equal-subsidy direct loans. It would not, however, eliminate the distortions of budget data resulting from the sale of physical assets, the shifting of cash outlays from one fiscal year to an adjacent one, and the creation of new off-budget government sponsored enterprises.

11.7

TABLE II-11. CBO BASELINE CREDIT PROJECTIONS (By fiscal year, in billions of dollars)

	1986	1987		3			
Credit Activity	Actual	Base	1988	1989	1990	1991	1992
Net Direct Loan							
Obligations							
Commodity Credit							
Corporation	18	19	17	16	15	13	12
Other	<u>25</u>	23	<u>21</u>	<u>21</u>	_20	_21	_22
Subtotal	43	42	38	37	35	34	34
Primary Loan							
Guarantees							
FHA and VA	138	106	82	81	84	88	92
Other	22	35	34	<u>36</u>	<u>37</u>	38	39
Subtotal	160	$\overline{141}$	116	$\overline{117}$	$\overline{121}$	$\overline{126}$	131
Total	203	183	154	154	156	160	165

SOURCE: Congressional Budget Office.

decrease in commodity price support loans, which currently represent about 40 percent of direct federal loans. Commitments for primary guaranteed loans are projected to decrease from \$141 billion in 1987 to \$116 billion in 1988, then rise to \$131 billion by 1992. Housing loan guarantees of the Federal Housing Administration and Veterans Administration, which comprise the vast majority of federal guarantee commitments, are expected to decline 22 percent-from \$106 billion in 1987 to \$82 billion in 1988--because of a drop in mortgage refinancing.

ECONOMIC GROWTH, CAPITAL FORMATION,

AND THE FEDERAL DEFICIT

An important consideration for policymakers is the rate at which the economy can be expected to grow in coming years. Economic growth is one of the factors that determine the country's standard of living and the level of public services and programs it can support. The rate of economic growth is also one of the most important variables underlying the CBO longer-term budget projections.

For part of the projection period, CBO has relied on the assumption that the economy would grow in coming years at about its average rate since World War II. Some analysts now question this assumption, on the ground that the rate of growth in recent years has been less than the historical average. If they are right, and if CBO continued to rely too heavily on average historical experience in making its projections, the result would be to project larger federal revenues and lower outlays than are warranted. Policymakers would then be confronted with larger deficits than they had been led to expect.

This chapter examines the growth of the economy with an aim to measuring the slowdown in growth, assessing its causes, and determining whether the slowdown is likely to continue through the 1980s. It also discusses whether past budget deficits have themselves been partially responsible for the slowdown in growth. The chapter ends with a discussion of how different assumptions about economic growth affect the budget projections.

THE GROWTH OF REAL GNP SINCE WORLD WAR II

The average annual rate of growth of real gross national product (GNP) for the last 15 years has been much lower than it was in the first two decades of the postwar period. From 1973 through 1985, the economy grew by only 2.3 percent compared with a rate of 3.7 percent for 1948 through 1973. Because this slowdown occurred during a period when the labor force and employment were growing more rapidly than before, it is particularly troubling.

The more rapid growth in the labor force and employment began in the late 1960s as the postwar baby boom generation entered the labor force.